

CLAIMS

1. A method of preparing Memantine Hydrochloride characterized by the following processing steps:
Maintaining 1-bromo-3,5-dimethyl adamantane and urea/formic acid at 50-180°C for 0.25-5h; after the completion of reaction, adding inorganic acid aqueous solution and performing hydrolyzation at a pH of 1-3; adjusting with inorganic base aqueous solution until the reaction solution becomes basic; after the extraction with organic solvents, salifying the extract with hydrochloric acid to yield the target product Memantine Hydrochloride.
2. The method according to claim 1, characterized in that said urea-formic acid serves as reaction solvent for ammonization and the said formic acid is anhydrous formic acid or formic acid aqueous solution.
3. The method according to claim 1, characterized in that the molar ratio of 1-bromo-3,5-dimethyl adamantane, urea and formic acid is 1:0.5~10:1~15.
4. The method according to claim 3, characterized in that the molar ration of 1-bromo-3,5-dimethyl adamantane and urea and formic acid is 1:2~5:5~10 and the reaction temperature is from 60°C to 150°C.
5. The method according to claim 1, characterized in that the hydrolysis temperature is from 50°C to 100°C and the duration is from 0.5h to 5h.
6. The method according to claim 1, characterized in that the said inorganic acid is one selected from hydrochloric acid, hydrobromic acid, sulphuric acid, phosphoric acid or their mixture.
7. The method according to claim 1, characterized in that the said reaction solution has a pH of 10 to 14 adjusted by inorganic base and its aqueous solution.
8. The method according to claim 1, characterized in that the said inorganic base is one selected from sodium hydroxide, potassium hydroxide, sodium carbonate, potassium carbonate, sodium hydrogen carbonate, potassium hydrogen carbonate or their mixture.

9. The method according to claim 1, characterized in that the organic solvent used for extraction is one selected from hydrocarbon, ester, ether or their mixture.
10. The method according to any one from claim 1 to 9, characterized in that Memantine Hydrochloride is obtained by recrystallizing the said salt with recrystallizing solvent, the said recrystallizing solvent is one selected from alcohol, ketone, water or their mixture.